

AMENDMENT B
(37 C.F.R. 1.111)

IN THE SPECIFICATION:

Please amend the specification in accordance with 37 C.F.R. 1.121.

On page 1, after line 13, add a description of newly added Fig. 4. The affected amended paragraph is attached herein on a separate sheet.

At the beginning of line 1 on page 3, add a general lead in regarding Fig. 4 to the paragraph describing the inventive process.

The affected amended paragraphs are attached herein on separate sheets.

IN THE DRAWINGS:

Please substitute the enclosed corrected Fig. 1 for the same drawing filed with the original application. The designation -- PRIOR ART -- has been added as requested by the Examiner.

Please substitute the enclosed corrected Fig. 2 for the same drawing filed with the original application. The designation -- PRIOR ART -- has been added as requested by the Examiner.

Please add new Fig. 4 as requested by the Examiner.

A marked-up version of the amended Figure(s) and the new substitute drawings are attached herein.

AMENDMENT TO SPECIFICATION

On page 1:

In the accompanying drawings:

Fig. 1 is a general schematic overview flowchart depicting a typical phosphate ore processing step;

Fig. 2 is an overview flowchart showing typical phosphate ore feed preparation steps; ~~and~~

Fig. 3 is a graphic illustration showing no adverse affect of the reagent used in the present invention on the clay settling; and

Fig. 4 is a conceptual flow chart of the inventive process during desliming of a phosphate ore feed slurry.

On page 3:

As generally shown in the flow chart of Fig. 4, to ~~To~~ the slurry is added either a sufficient amount of a surfactant/surfactants, a sufficient amount of an organic polymer/polymers and/or a sufficient amount of a combination of surfactants and organic polymers. The surfactants and/or polymers are mixed with the slurry so as to reduce the viscosity of the slurry. The fine phosphate ore particles thereby settle along with the coarser fraction and are then collected and routed or directed through a beneficiation process for recovering the phosphate ore product. Phosphate ore losses to the waste clay stream are reduced using the present invention method without adversely effecting the settling rate of slimes in clay ponds as shown in the examples illustrated in Fig. 3. Fig. 3 shows the settling rates of the clay slurry at various settling times under conditions where no reagent is added, 6 ppm of reagent is added, 30 ppm of clay flocculent which is typically used to enhance the settling of clay is added, and 6 ppm of reagent is added together with 30 ppm of clay flocculent. The settling rates of the clay in the presence of 6 ppm of reagent are the same without any addition of reagent; and the settling rates of the clay in the presence of 30 ppm of clay flocculent are not effected by the addition of the 6 ppm of reagent used in the present invention. The four curves depicted in Fig. 3 are reflective of the results of each condition tested.